

What Is Claimed Is:

1. A fuel injector (1) having an actuator, a valve-closure member (4) able to be actuated by the actuator, which cooperates with a valve-seat surface (6) to form a sealing seat; a spray-discharge orifice (7), and a seal (37) for sealing the fuel injector (1) from a valve mount opening (48) of a cylinder head (43), the seal radially surrounding the region of the discharge-side end of the fuel injector (1), at least a first section (38) of the seal (37) resting against the valve mount opening (48) in a sealing manner, wherein, via at least an axial partial section (46), which extends only across a portion of the axial length of the seal (37), the seal (37) is fitted in the region of the discharge-side end of the fuel injector (1) in integral fashion, by form-fit and/or force-locking.
2. The fuel injector as recited in Claim 1,
wherein the seal (37) is fitted by welding or laser welding and/or by tamping or pressing.
3. The fuel injector as recited in Claim 1 or 2,
wherein the seal (37) is made of metal, in particular from reformable steel, V2A steel, a copper alloy and/or a brass alloy.
4. The fuel injector as recited in one of the preceding claims,
wherein at least a portion of the seal (37) has the form of a sleeve.
5. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) is at least partially produced by reforming, in particular by deep-drawing or crimping.
6. The fuel injector as recited in one of the preceding claims,
wherein the first section (38) is prestressed by an initial stress with respect to the wall of the valve mount opening opening (48) and is at least partially permanently elastic, whereby at least a portion of the initial stress is generated.
7. The fuel injector as recited in one of the preceding claims,
wherein the first section (38) projects at least partially toward the outside compared to the adjoining parts of the seal (37).

8. The fuel injector as recited in one of the preceding claims,
wherein the first section (37) is wave-shaped in cross-sectional profile and thus
sealingly rests against the valve mount opening (48) at a plurality of points.
9. The fuel injector as recited in one of the preceding claims,
wherein the first section (37) is formed as a partial circle in cross-sectional profile
and/or widens the diameter of the seal (37) toward the outside in the form of a partial
circle.
10. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) has an at least partially U-shaped cross-sectional profile, the
outer side being formed by the first section (38) and the inner side being formed at
least partially by the partial section (46).
11. The fuel injector as recited in Claim 10,
wherein the bottom of the U-shaped section is situated at the level of a step (47) or at
the level of the discharge-remote end of a recessed-diameter region (45).
12. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) extends between the discharge-side region of the fuel injector
(1) and the valve mount opening (48), axially up to a transition region (39) where the
valve mount opening (48) goes over into the combustion chamber.
13. The fuel injector as recited in one of the preceding claims,
wherein the first section (38) rests at least partially in sealing fashion on a tapering
first bearing surface (41), which reduces the diameter of the valve mount opening
(48).
14. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) is indirectly prestressed with respect to at least the first bearing
surface (41) via other components of the fuel injector (1).
15. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) is at least partially coated.
16. The fuel injector as recited in one of the preceding claims,
wherein the seal (37) is beveled on the outside at least at one of its ends.